



New England Correctional Institution Farmland

Inventory of Lands of Conservation and Recreation Interest

Concord's long history of conservation planning has led to permanent protection of over one third of its land area, including forests, farmland, and wetlands. Much of the remaining land has either been developed or is held by town, state, or federal government agencies, and is therefore not facing an immediate threat of development. Concord residents might question the value of an Open Space and Recreation Plan when so much is already protected. However, there are still critical parcels that remain at risk for development, including farmland and critical habitat for endangered species.

A) Open Space in Concord

Open space generally refers to an unbuilt or undeveloped area with some form of protection against future development. For the purposes of an Open Space and Recreation Plan, open space refers to a relatively continuous area of public or private lands without buildings or highways that holds significant value either for conservation or recreation. To provide a functional network of natural, cultural, and recreational resources for a town's future, protection of key open space properties is important.

Open space comes in varied forms, especially farmland, playing fields, parks, and other types such as golf courses and gravel pits. In Concord, town-owned open space is either conservation land, municipal land, or public school land. The first is considered to be permanently protected and is managed for conservation values such as wildlife habitat, groundwater, and aquatic ecosystems. Municipal land is managed for various town purposes, including but not limited to, recreation, cemetery, and sewage treatment, which may change over time and may include areas held for potential future needs. Town municipal land may include natural areas managed for, but not protected for, conservation value.

Most conservation land is in a natural state (i.e., not

planted or intensively managed), and is protected against development in perpetuity. In Concord, much of the agricultural land is protected to some degree, but less than one third is permanently protected as conservation land.

Conservation lands may be permanently protected through fee-simple ownership or through a conservation restriction (CR). Conservation and other public and private lands may be further restricted under an agricultural preservation restriction (APR), to preserve farmland use in perpetuity. Temporary protection may be through current use programs (Ch. 61, Ch. 61A, and Ch. 61B).

Of the 15,936 acres of land in Concord, approximately 6,119.84 acres (38 percent) are permanently protected open space.

The following pages look closely at the open space lands in Town, which are divided into private, public, and non-profit lands. Priority parcels for protection were identified using several criteria, including water resources, rare species habitat, prime farmland, existing built areas, existing trails, historic districts and other culturally important sites, and areas identified by residents at the town meetings and in the 2007 *Freedom's Way Landscape Inventory Reconnaissance Report*.

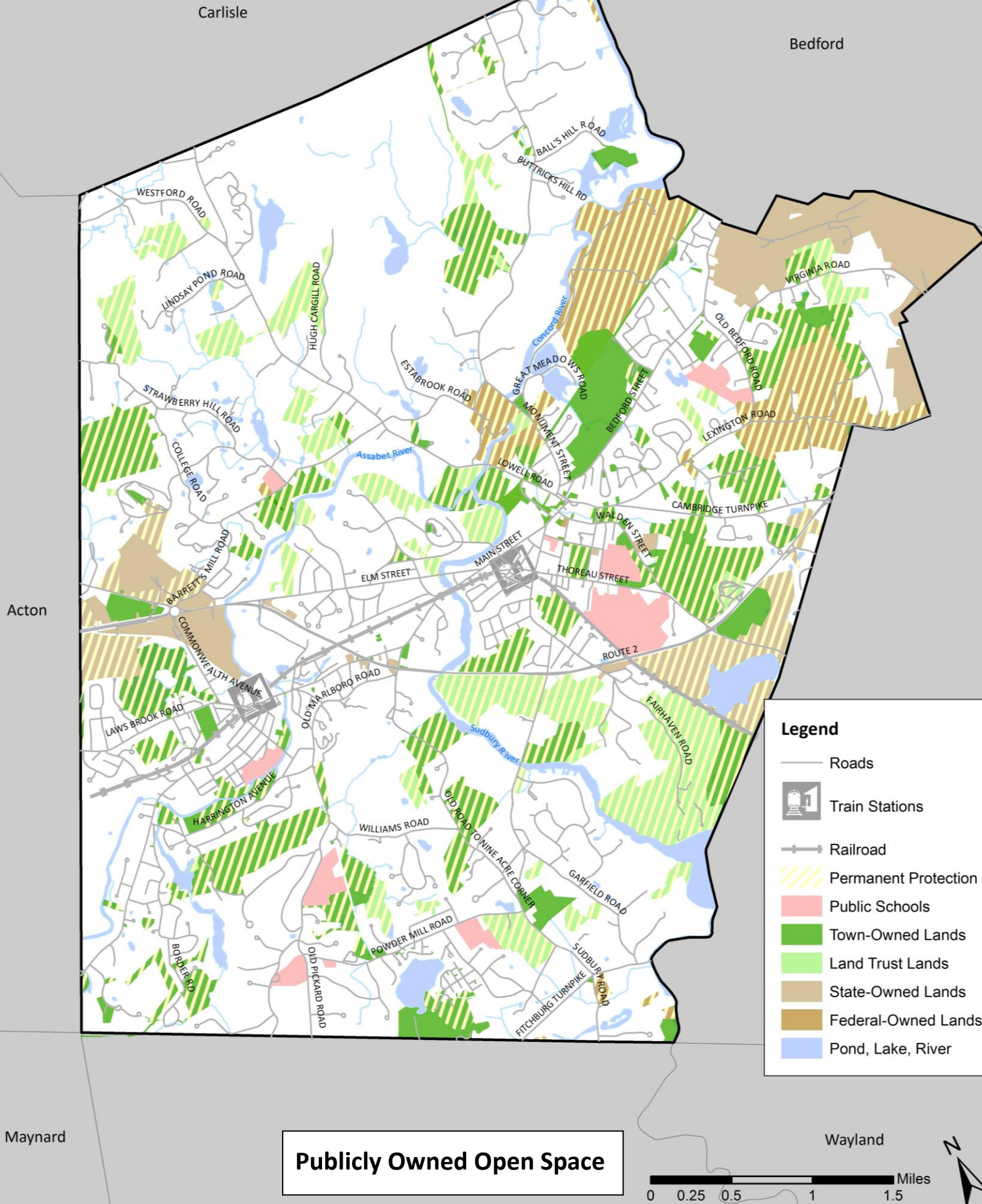
Publicly & Non-Profit Owned Open Space

Most of the best known conservation land in the community is the land that is publicly owned and accessible. The Town owns over 2,200 acres managed by various entities, including the Natural Resources Commission, the Board of Selectmen, the Water and Sewer Division, the Recreation Department, the Municipal Light Plant, and Concord Public Schools. Of these 2,200 acres, approximately 1,548 acres is considered permanently protected. Significant open space holdings include Hapgood Wright Town Forest at 175 acres, the Old Rifle Range at about 120 acres, Annursnac Conservation Land at 118 acres, Punkatasset Conservation Land, 100 acres adjacent to Estabrook Woods, and Warner's Pond and adjacent conservation lands at 77 acres. These areas provide valuable habitat for wildlife and are components of larger landscape blocks and wildlife corridors. These are also highly valued by residents

for their many passive recreation opportunities including hiking, birding, cross-country skiing, and wildlife viewing. There are several moderately-sized farmland parcels owned by the Town that range in size from 15 to 40 acres. The majority of the other parcels held are less than 10 acres and include forested land, wetlands, and open fields.

At 2012 Town Meeting, the community voted to acquire the 80-acre W.R. Grace property at 214Y Main Street (Assessor's Parcel #2322) for municipal purposes including public works, solar electrical generation, recreation, and open space. This acquisition is still under negotiation as of the time of this report, therefore the acreage is not represented in the table below, and the parcel is not shown on the map.

Publicly & Non-Profit Owned Open Space	Acres	% of Total Land Area in Concord (15,936 ac total)
Town Owned – Natural Resources Commission (all permanently protected)	1359.85	8.5%
Town Owned – Board of Selectmen	434.23	2.7%
<i>Permanently protected by Conservation Restriction or APR</i>	12.8	0.08%
<i>Deed restricted</i>	12.36	0.08%
<i>Unprotected</i>	406.07	2.5%
Town Owned – CPW - Water and Sewer Division (all protected)	125.9	0.79%
Town Owned – Recreation Department	37.12	0.23%
<i>Permanently protected (Article 97)</i>	37.12	0.23%
Town Owned – Municipal Light Plant (all unprotected)	34.29	0.22%
Public Schools (all unprotected)	246.9	1.55%
State Owned Lands	1017	6.4%
<i>Permanently protected</i>	257.2	1.6%
<i>Permanently protected by Article 97</i>	130.38	0.82%
<i>Temporarily protected</i>	101.1	0.63%
<i>Unprotected</i>	528.32	3.3%
Federally Owned Lands	638	4.0%
<i>Permanently protected</i>	637	4.0%
<i>Unprotected</i>	1	.006%
Land Trust Lands (all permanently protected through ownership or CR)	1018	6.4%
<i>Concord Land Conservation Trust</i>	881.6	5.5%
<i>Walden Woods Project</i>	84.17	.5%
<i>Sudbury Valley Trustees</i>	33.4	.2%
<i>The Trustees of Reservations</i>	11.46	.07%
<i>Lincoln Land Conservation Trust</i>	7.31	.05%
Total publicly owned open space	4,911.29	30.8%
Total permanently protected publicly owned open space	3,590.6	22.5%



Public and Nonprofit Parcels

This section provides a descriptive inventory of public conservation and recreation resources including federal, state, municipal, and nonprofit conservation lands.

Recreational Facilities:

Boat Launches: There are seven formal boat launches to access rivers and ponds. Boat launches to access the Assabet River are located at Westvale Meadows and behind Dino's Pizza on Main Street, and at the Pine Street Bridge. One can access all three major rivers from the Lowell Road Bridge boat launch. Boat launches are also available at Walden Pond at 90B Walden Street, Warner's Pond at 39A Commonwealth Avenue, and White Pond off Plainfield Road.

Beede Center: Located on the Concord-Carlisle Regional High School property, the Beede Center features a 25 yards by 25 yards, 8-lane competition pool; a 30-foot by 40-foot diving well featuring two 1-meter boards and one 3-meter board standing over 13 feet of water; a 20-foot by 30-foot warm water therapy pool; and a children's play pool featuring sprays, fountains and a slide. There are two fitness rooms: one furnished with Cybex Treadmills, Arc Trainers, semi-recumbent and upright cycles, rowing machines, and stair steppers, and one furnished with Cybex strength training machines and free weights.

Cousins Park: Located at the end of Brown Street, the park contains an open informal multi-use field, community gardens, and a hiking trail to the Assabet River.

Emerson Field: Located at 26 Stow Street, Emerson Field contains a multi-use field, two 60-foot baseball/softball fields, a playground, a ¼ mile track, five tennis courts, a 90-foot baseball field, two basketball courts, and a swimming pool.

Hunt's Recreation Center: Located at 90 Stow Street and adjacent to the Emerson Field, the Hunt's Gym consists of a full size accessible gymnasium, a Multi-purpose Room, a Conference Room, and public bathrooms.

Rideout Playground: Located on Lawsbrook Road, the Rideout Playground consists of three 60-foot baseball/softball fields, one 90-foot baseball field, two basketball courts, three tennis courts, a fully accessible playground and public bathrooms.

South Meadow Field: Located off of Riverside Road, the South Meadow Field has both active recreation

and passive conservation land. It consists of an open and informal multi-use field which is used by lacrosse in the spring, soccer in the fall and frisbee in the summer.

School Athletic Fields:

- Alcott Elementary, Thoreau and Willard Elementary Schools all have informal multi-purpose fields. Willard School also has 2 tennis courts.
- Peabody Middle School uses the Cushing Field, which is an adjacent multi-use field.
- Sanborn Middle School has two multi-use fields and a softball/baseball field diamond.
- Ripley School features a premier baseball facility which includes a 90-foot diamond, dugouts, and batting cages. This area also includes a multi-use field and a fully accessible Natural Playscape.
- Concord Carlisle Regional High School's outdoor athletic facilities and fields are scheduled for a major renovation. CC at Play, Inc., a private not-for-profit organization is currently renovating the fields in a three-phase project which will result in the following:
 - Six tennis courts
 - Installation of a turf field in the stadium which will accommodate, football, soccer, lacrosse and field hockey
 - Half-mile accessible walking track around the perimeter
 - Renovation and upgrade of the varsity softball and baseball fields
 - Concession stand and bathrooms
 - Construction of a full-size multisport grass field

Conservation Facilities:

Annursnac Conservation Land: Purchased by the Town in 1970 from Harvard University, this 118-acre property between Annursnac Hill and Strawberry Hill contains about one mile of trails over varied terrain of wooded hills, meadows, and wetlands intersected by a brook.

Battle Road: This five-mile trail within the Minute Man National Historical Park owned by the National Park Service traverses farm fields, wetlands, and forests, connecting historic sites from Meriam's Corner in Concord to the eastern boundary of the park in Lexington. The main theme of the trail is the Battle

of April 19, 1775 which interprets the broader human story of the people whose lives were altered by this event.

Bear Garden Hill: This 43-acre forested tract was one of the places where Henry Thoreau studied forest succession and was purchased by the Walden Woods Project in 1990. The parcel provides a popular access point for trails connecting to the Farm at Walden Woods, Town wellhead protection land, and other conservation land.

Bigelow Woods and Soutter Field: Located at the corner at Sudbury Road and Route 2, this 77-acre Concord Land Conservation Trust (CLCT) property consists of large open fields, currently used for cattle grazing, and an extensive wet woodland which is home to a variety of wildlife. An 18-acre portion of Soutter Field was acquired in 2008 as a joint effort between the Town and CLCT, and represents an important step to save local farmland.

Chamberlin Park: This 0.7-acre off Lowell Road just outside Monument Square was donated to the Town by Mary Chamberlin in 1969. The Town later constructed a footbridge over the Mill Brook, connecting the land to the Keyes Road municipal parking area.

Chamberlin Woods: This CLCT property consists of 59 acres of land, mostly wooded, on the west side of Lowell Road. The land was donated by the five Newbury children of Mrs. Chamberlin in 1999 and connects to other holdings in the Upper Spencer Brook Valley.

Community Gardens: There are three Town-managed community gardens: Cousins Community Garden at 2A Shirley Street, East Quarter Community Garden at 33X Old Bedford Road, and Hugh Cargill Community Garden at 24B Walden Street.

Corey/Bourquin Land: Acquired by CLCT in 2006 and located off Lowell Road, this property contains 23 acres of hayfield, woods, and wetlands.

Estabrook Woods: Estabrook Woods is the largest contiguous and undeveloped woodland within thirty miles of Boston. Owned mostly by Harvard University, trails follow the route that the Minutemen traveled from Carlisle to the North Bridge to face off against the British in 1775. Henry David Thoreau wrote no less than 160 entries of his walks in Estabrook Woods. Remnants of its past can still be seen including a saw mill, limestone kiln and quarry, and a large glacial erratic dubbed by Thoreau as “Indian Rock” where he reported the Native Americans camped on

their seasonal wanderings.

Great Meadows Wildlife Refuge: In 1944, Samuel Hoar donated the first 250 acres of land that now makes up the refuge to the U.S. Fish and Wildlife Service (USFWS). Comprised of more than 3,800 acres of freshwater wetlands stretching along 12 miles of the Concord and Sudbury Rivers in Concord and Carlisle, the USFWS protects and manages Great Meadows as nesting, resting, and feeding habitat for wildlife, with special emphasis on migratory birds. The diversity of plant and animal life visible from the more than 2.5 miles of refuge trails provides visitors with excellent opportunities for wildlife viewing and nature study.

Hapgood Wright Town Forest: A walk in the Hapgood Wright Town Forest can be a relaxing time with over four miles of trails for exploring its natural features. This area witnessed the lives of freed slaves who settled here struggling to farm its poor soil in the 1700s and was frequented by 19th century literary figures Henry David Thoreau and Ralph Waldo Emerson, and the Alcott and Emerson children.

Harrington Park: In 1974 the Town acquired Harrington Park, which includes a house built around 1742 and the oldest known house in West Concord along with 15 acres of farmland extending from Harrington Avenue to the Assabet River. There are nature trails along the Assabet River in the rear of the property.

Heywood Meadow: Heywood Meadow holds a special place in the hearts and minds of Concord citizens. Just outside Concord Center, it is a surviving feature of the first inland settlement. Part of the meadow formed the Mill Pond, used in early industry, it was witness to the events of April 19, 1775, and it inspired many of Concord’s 19th century authors. This Town land includes two open fields bisected by Heywood Street, along with two parcels on Walden Street on the other side of Mill Brook.

Hutchins Land: This 16.5-acre CLCT property is in the Estabrook Woods and adjacent to Punkatasset Conservation Land.

Kazmaier Land: Located near Elm Street, CLCT’s open fields totaling 16 acres are used for agricultural purposes.

Keyes Land: This CLCT property consists of almost 28 acres of woodland on Strawberry Hill Road, and connects to other CLCT holdings in the Upper Spencer Brook Valley.

Mattison Field: Purchased by the Town in 1998,

Mattison Field contains 1.5 miles of trails over 43 acres within an agrarian setting complete with an historic, wooden water tower used to water cows until the mid-1990's. Mattison Field is also home to breeding bobolink during the summer.

Miller Farm: Acquired by CLCT in 2001, the 52-acre Miller Farm consists of wooded upland and farmland along Sudbury Road in active agricultural use.

Nashawtuc Hill: Concord's three major rivers are the backdrop for this assemblage of CLCT lands including Simon Willard Woods (65 acres), Brengle-Ham Field (7 acres), Brooks Hudson Field, French's Meadow (29 acres), and Sherwood Red Maple Swamp (10.5 acres) which are connected by an abandoned railroad right of way.

Newbury Land: Located across Lowell Road from Chamberlin Woods, this 34-acre parcel donated to CLCT in 1990 offers some of the most beautiful riparian and meadow landscapes in Concord.

Old Calf Pasture: Located off Lowell Road just before the bridge over the Concord River, at the confluence of the Assabet and Sudbury Rivers, this Town land includes an open pasture which is home to the largest known population of a state-listed rare violet, ½ mile of wooded riverside trails, a picnic area, and a boat launch for the three rivers.

Old Manse: Adjacent to the Old North Bridge, this property, owned by The Trustees of Reservations, became the center of Concord's political, literary, and social revolutions. In the mid-19th-century, leading Transcendentalists such as Bronson Alcott, Henry David Thoreau, and Margaret Fuller discussed the issues of the day here, with the Hawthorne and Ripley families.

Old North Bridge: Site of the "shot heard round the world" this picturesque landscape is home to the birth of our nation. Managed by the National Park Service, this property contains one mile of trails, the North Bridge Visitor Center, and Daniel Chester French's Minute Man statue.

Old Rifle Range: Acquired in 1909 for the Massachusetts Volunteer Militia, this 111-acre area saw extensive use in training soldiers prior to deployment in World War I. The range contains 1.7 miles of woodland trails and still retains its four abutments used for military training.

Punkatasset Conservation Land: On the southeast boundary of Estabrook Woods, this 100-acre woodland contains over 2 miles of trails, Hutchins Pond, and Punkatasset Hill, the vantage point from which

the Minutemen saw smoke emanating from Concord center. Fearing their homes were being burned by the British, Colonel Barrett led his militia to the Old North Bridge on April 19, 1775.

Rogers Land: Acquired jointly with CLCT in 2010, this 4.74-acre parcel is currently undergoing site and slope restoration in order to bring the property back into active agriculture. Once completed, the Rogers Land will provide farming and community garden opportunities, as well as walking trails along the bluff of the Assabet River.

Spaulding Land: Donated to CLCT in 2002, this property totals nearly 40 acres along Elm Brook off Virginia Road and abuts the Thoreau Birth House, Gaining Ground, and Hanscom Field.

Thoreau's Path at Brister's Hill: Purchased in 1993 by the Walden Woods Project to help protect the internationally-significant Walden Woods, this 18.6-acre parcel contains an interpretive walking trail with inspirational quotations by Henry Thoreau and other environmental and social reform leaders. Thoreau's Path is part of the Town's first handicap assessed trail loop.

Walden Pond: The backdrop to Henry David Thoreau's *Walden*, Walden Pond is considered the birthplace of the conservation movement. Located at 915 Walden Street, the 335-acre Walden Pond State Reservation includes swimming, over six miles of trails, a gift shop, bookstore, and the Tsongas gallery.

Warner's Pond: Warner's Pond has been a source of economic development and pleasure since its origin in the mid 1800's. Once a summer recreational area complete with picnic area, playground, swimming beach, and boat rides, Warner's Pond has experienced significant eutrophication. Efforts are needed to restore this resource area.

White Pond: Comprised of over 73 acres in Town ownership under three entities (Board of Selectmen, Natural Resources Commission, and the Water and Sewer Division), these lands contain 2.5 miles of walking trails overlooking the picturesque White Pond.

Wright Woods: The anchor of CLCT holdings, the 213-acre Wright Woods offers a variety of walks to Fairhaven Bay and the Sudbury River. One of the most scenic trails in Concord runs from Fairhaven Bay along and above the Sudbury River, past what Thoreau called Grape Cliff.

Privately Owned Open Space

Privately owned open space in Concord includes private institutional lands, lands in Chapter 61, 61A, and 61B tax programs, and other properties under private ownership with some level of protection, either through a CR, APR, or other means of protection.

Educational institutions, both public and private, are the main landholders of institutional lands. Some of this land has no open space and recreation potential. However, of significant note are the 612 acres held by Harvard and the 333 acres held by Middlesex School that form a portion of Estabrook Woods. These lands, together with adjacent Town, Land Trust, and CR lands, form the largest intact natural area in Town. Highly valued ecosystems, these forests and wetlands are vulnerable to future development because only 122 acres of the Middlesex property are permanently protected by CR. Harvard University protected its 612 acres as

open space by recording a Notice of Public Charitable Obligation in the Middlesex County Registry of Deeds. While protection of any of the smaller landholdings is beneficial, efforts geared towards maintaining the integrity of the Estabrook Woods natural area are especially important.

Chapter 61, 61A, and 61B lands, which are afforded temporary protection as long as they are maintained for forestry, agriculture, and recreation respectively, constitute 12.7 percent of the land in Town. Over one third of that land is permanently protected by CR. This figure could be increased as the Town has right of first refusal should any of these properties become available while enrolled in the program and for one year thereafter. The Town should continue to prioritize protection of these lands as they become available, especially when doing so will support town-wide conservation objectives including rare species habitat, agricultural land protection, or sensitive water resources.

Privately Owned Open Space	Acres	% of Total Land Area in Concord (15,936 ac total)
Institutional Lands	1330.68	8.4%
<i>Permanently protected by Conservation Restriction or other mechanism</i>	642.34	4.0%
<i>Unprotected or temporarily protected</i>	688.34	4.3%
Chapter Lands	2,029.5	12.7%
<i>Temporarily Protected under Chapter 61</i>	480	3.0%
<i>Permanently Protected Chapter 61 Lands by Conservation Restriction</i>	245.6	1.5%
<i>Temporarily Protected under Chapter 61A</i>	683	4.3%
<i>Permanently Protected Chapter 61A Lands by Conservation Restriction or APR</i>	331.59	2.1%
<i>Temporarily Protected under Chapter 61B</i>	866.5	5.4%
<i>Permanently Protected Chapter 61B Lands by Conservation Restriction</i>	220.8	1.4%
Additional Private Lands Permanently Protected by Conservation Restriction or APR	1088.9	6.8%
Total privately owned open space	4,449.08	27.9%
Total permanently protected privately owned open space	2,529.23	15.9%

Carlisle

Bedford

Acton

Lincoln

Maynard

Wayland

Privately Owned Open Space

Legend

- Conservation Restrictions
- Agricultural Preservation Restriction
- Private Institutions
- Chapter 61
- Chapter 61A
- Chapter 61B
- Roads
- Railroad
- Pond, Lake, River

0 0.25 0.5 1 1.5 Miles



Process to Identify Priorities for the 7-Year Action Plan

The Open Space Framework (OSF) identifies town-wide landscape types. When mapped, these reveal a pattern of large intact areas and major corridors. Special sites are also scattered across Town. The 1992 OSF has been updated to reflect changes in Concord over the past two decades.

The methodology for creating this seven-year action plan began by updating the 1992 OSF in the following ways:

- Natural areas were expanded to include portions of BioMap2;
- Two new natural areas were created to reflect the BioMap2;
- A built area was added to reflect development since 1992; and
- Agricultural areas were expanded to include adjacent Chapter 61A lands.

The parcel inventory was used to determine the permanently protected land in Concord. Unprotected parcels within any large natural areas, large agricultural areas, or wildlife and water corridors in the 2015 OSF are considered to be areas of

conservation and recreation interest.

To further prioritize parcels, those lands identified as priorities in the 2004 OSRP were compared with the 2015 OSF map. Lands of conservation and recreation interest made up of unprotected land within the large natural and agricultural areas and corridors in the 2015 OSF are identified as “Lands of Conservation Interest in OSF” on the Lands and Properties of Conservation and Recreation Interest maps. Unprotected properties shown on the 2004 Special Sites map are all included within the 2015 priority properties for conservation and recreation interest.

If further prioritization of the identified properties of conservation and recreation interest (see Section 9) were desired, a point system could be created for ranking properties according to certain criteria. For example, a property could be awarded points for the number of special sites in its proximity, a point for chapter land, a point for prime agricultural soils, etc. Points could be summed for each parcel and properties with a high number of points would be ranked as having higher importance for protection.



Raccoon by Ryan Schain

Below are the major processes and patterns of open space, natural resources, and recreation in the region that affect Concord, as well as those of Concord that affect the region. The patterns and processes discussed below were used to identify or rank lands with highest conservation value.

Large vegetation areas, including wetlands

- 1) Serve as habitats and dispersal sources for species with large home ranges;
- 2) Serve as habitats and dispersal sources of rare interior species;
- 3) Protect groundwater and provide clean water for well systems, as well as streams, rivers and ponds; and
- 4) Serve as sponges that reduce or prevent downstream flooding.

Major water-protection corridors along streams, rivers and ponds

- 1) Reduce erosion, sedimentation, mineral nutrient and other chemical input effects on water bodies;
- 2) Provide shade, logs/branches, and leaf litter as food and habitat for aquatic organisms including fish;
- 3) Serve as wildlife corridors for terrestrial resident and migratory fauna; and
- 4) Serve as recreational corridors for canoeists, kayakers, and boaters.

Major wildlife corridors away from a water body

- 1) Serve as movement routes for key animals, including bear, deer, fisher, rare amphibians, and many other fauna, either between large vegetation areas or as a dispersal route from a large vegetation area.

Special sites (small habitats) containing rare species

- 1) Serve as population sources of individuals dispersing to surrounding areas; and
- 2) Protect against loss of species and biodiversity.

Walking trails, including trail networks, away from roads

- 1) Provide recreational routes, often connecting large vegetation areas to neighborhoods, for residents to experience and appreciate nature; and

Agricultural land

- 1) In large patches may support rare grassland birds, such as upland sandpipers and grasshopper sparrows;

2015 Open Space Framework

Large Agricultural Areas:

- A1. Nine Acre Corner
- A2. Lexington Road
- A3. Monument Street
- A4. Williams Road / Sudbury Road / Route 2
- A5. Reformatory Farms / Barrett's Mill Road

Large Natural Areas:

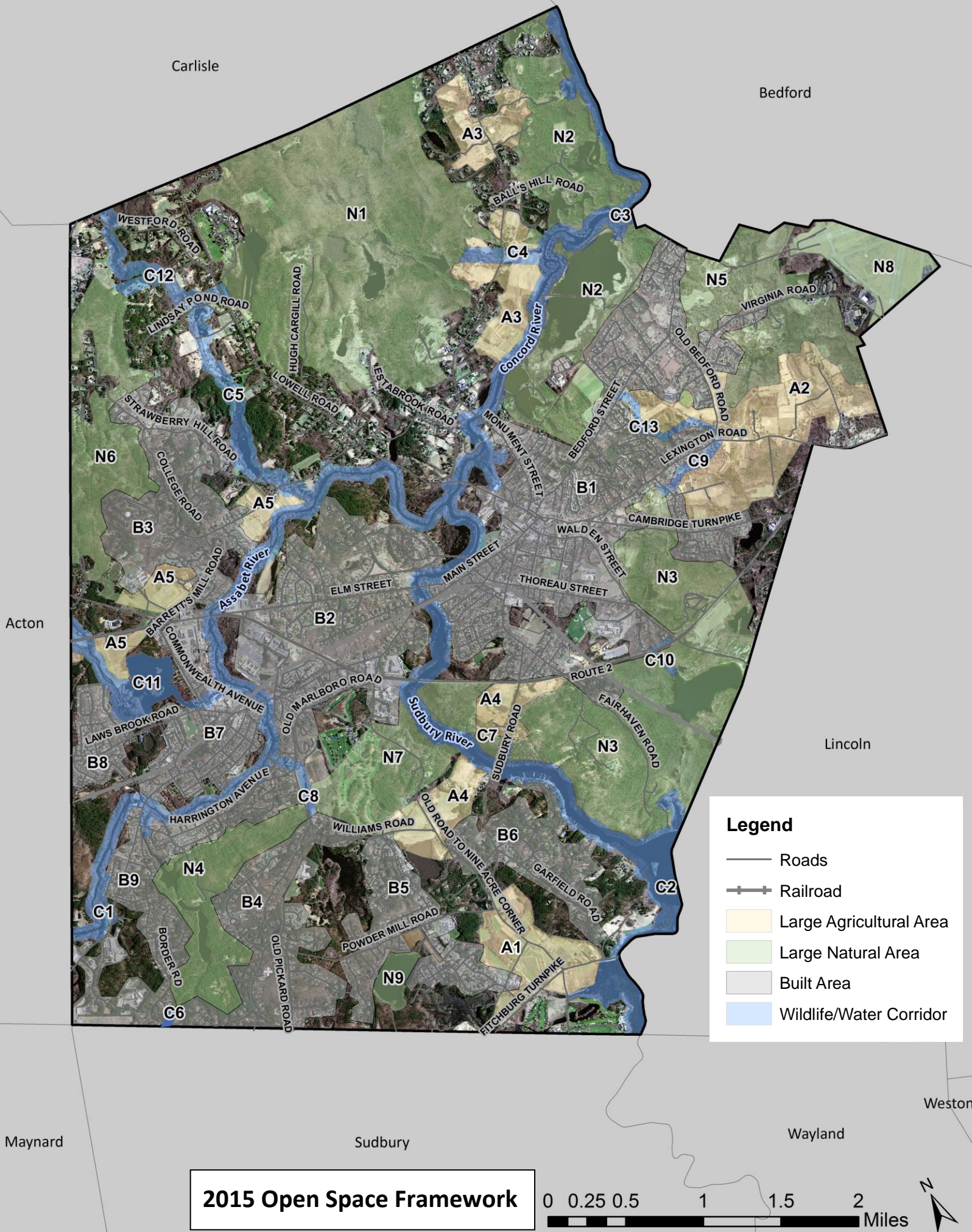
- N1. Estabrook Woods Area
- N2. Great Meadows / Ball's Hill Area
- N3. Walden Woods / Town Forest
- N4. Second Division Brook Area
- N5. Virginia Road Woods
- N6. Annursnac Hill / Strawberry Hill Road
- N7. Jennie Dugan Kames
- N8. Hanscom
- N9. White Pond

Large Built Areas:

- B1. Concord Center / Bedford Street
- B2. West Concord / Elm Street
- B3. Annursnac Hill / Barrett's Mills Road
- B4. Peabody / Sanborn Schools
- B5. White Pond Area
- B6. Garfield Road
- B7. Thoreau School
- B8. Hillside Ave / Sorrel Road
- B9. Second Division Brook

Major Wildlife and Water-Protection Corridors:

- C1. Assabet River
- C2. Sudbury River
- C3. Concord River
- C4. Saw Mill Brook
- C5. Spencer Brook
- C6. Second Division Brook
- C7. Jennie Dugan Brook
- C8. Second Division Brook / Jennie Dugan Kames to Assabet River
- C9. Virginia Road Woods Area to Walden Woods / Town Forest
- C10. Town Forest to Walden Reservation via railroad underpass and school land
- C11. Nashoba Brook / Warner's Pond
- C12. Annursnac Hill / Strawberry Hill Road Area to Estabrook Woods Area
- C13. Virginia Road Woods to Great Meadows / Ball's Hill Area



-
- 2) Many small or large patches may support populations of other grassland species such as bobolinks and eastern meadowlarks, as well as other wildlife that regularly use open areas such as turkey and deer;
 - 3) Provides a diversity of recreational experience in a landscape of woods and residential areas; and
 - 4) May result in greater erosion, sedimentation, nutrient runoff (from fertilizers), pesticide runoff to streams, rivers and ponds.

Residential land

- 1) Has a high diversity of common and non-native plants and micro-environmental conditions that support a high diversity of edge species: such as Carolina wrens, American robins, and catbirds;
- 2) Has a high density of animals that benefit from food provided by people, e.g., raccoons, gray squirrels, deer, house sparrows, and blue jays;
- 3) Is a source of human, invasive exotic plant, dog, and cat effects that can degrade ecological conditions of surrounding natural areas;
- 4) Tends to act as a barrier that cuts wildlife corridors;
- 5) May have a relatively high percent of hard surfaces (e.g., roofs and driveways) that increase flooding, and tends to dry out streams and wetlands in late summer;
- 6) Tends to have an elevated level of chemical substances from septic effluent, yard fertilizers/pesticides, and other sources, that may pollute groundwater and surface water bodies; and
- 7) Is a source of vehicular traffic that requires roads, causes road maintenance/repair effects, results in road salt and sand effects, causes traffic noise and disturbance, and may increase shopping / commercial / industrial development.

Shopping, commercial and industrial areas

- 1) Have a high percentage of hard surfaces (e.g., roofs and parking areas) that increase flooding and may dry out streams and wetlands in late summer;
- 2) Produce considerable vehicular traffic during certain periods;
- 3) Tend to have solid waste problems resulting in times when materials disperse into water channels or surrounding areas;
- 4) Have effluents from commercial/industrial processes and parking lots that can pollute groundwater, streams, or rivers; and
- 5) May have particulate, aerosol or gaseous air-pollutant effects on the surroundings.

Roads with vehicles

- 1) Roads, especially busy and/or wide ones, tend to be barriers that disrupt wildlife corridors;
- 2) Are a source of road salt that may degrade nearby groundwater, vernal pools, shallow ponds, streams, and wells;
- 3) Are a source of sand (mixed with road salt) that may reach streams, either directly or through stormwater drainage pipes or snow dumping, which degrades habitat for many aquatic organisms including fish;
- 4) When especially busy, are a source of visual disturbance and traffic noise that degrades recreational use alongside;
- 5) When especially busy, are a source of traffic noise that degrades nearby songbird communities; and
- 6) Cause roadkills of amphibians, reptiles, birds, and mammals, especially near vernal pools, wetlands, ponds, and large vegetation areas.

Rail and air transportation

- 1) Produces noise that degrades recreational experiences and usage; and
- 2) May serve as wildlife passages, e.g., commuter rail lines and underpasses beneath Route 2.

B) Special Sites in Town

Special sites in Town were identified in the 1992 and 2004 *Open Space Plan* and are included again with the addition of boat launches and recreational facilities (see tables below).^{2, 3} Special sites include such diverse features as a rock outcrop, historic site, rare animal habitat, and recreational fields. They are grouped into eight categories: ecological habitats, geological features, historical, recreational, water resources, scenic, institutions and education, and town infrastructure.

The value of a special site is greater if it is (a) rare or unique at the national or state level, and (b) irreplaceable or, upon loss, requires centuries or decades to recover a condition similar to that of today. Thus an overall value of each special site to

the Town (and beyond) is determined, based primarily on the rarity and replacement/ recovery time for a site, with factors such as present usage a secondary consideration.

These value rankings are used to prioritize special sites for protection. Small geometric symbols on the map refer to key categories, and numbers in the symbols refer to the type of site (e.g., old forest, calcareous habitat, fish biodiversity site) within a category (e.g., ecological habitat). For each priority special site mapped, the core or essential character of the site is inadequately protected. About three-quarters of the priority special sites are located in large patches and/or major corridors.

"Relative Uniqueness." Only 1, 2, or 3 examples exist at the scale indicated.

*** = national/international

** = state

* = town

"Recovery/Replacement." If a site were severely damaged or destroyed by a one-time event, this is the approximate time required for recovery or replacement to a condition similar to that of the present.

*** = irreplaceable or centuries

** = decades

* = years

"Value" (to the Town and beyond the Town) – This assessment is based primarily, but not exclusively, on relative uniqueness and recovery time.

*** = highest

** = high

* = medium

- = low

"Sites Protected Now." This indicates whether sites are on permanently protected land, either public land in conservation use or other land under conservation restriction.

"Priority for Protection." These are of highest value and not on protected land.

Numbers in parentheses are given where more than three sites are present. A site may be listed in more than one category if it provides more than one value. The 1992 Open Space Plan provides a fuller description of the Special Sites analysis and table.

Features	Relative Uniqueness	Recovery Replacement	Value to the Town	Value Beyond Town	Sites Protected Now	Priority for Protection
GEOLOGICAL FEATURES						
1. River	*	**	***	-	no	*
2. Large deep pond	*	**	*	-	no	
3. Large siliceous rock outcrop	*	**	*	-	no	
4. Rock outcrop with calcite	*	**	*	-	no	
5. Marble area	*	**	**	-	no	
6. Pegmatite outcrop area	*	***	**	-	no	
7. Cluster of large glacial erratics	*	***	**	-	no	
8. Esker	*	***	**	-	no	
9. Neck of ancient volcano	*	**	*	-	no	

Carlisle

Bedford

Acton

Lincoln

Maynard

Sudbury

Wayland

Special Sites

Legend

- Geologic Sites
- Ecological Habitat Sites
- Historical Sites
- Water Resources Sites
- Recreational Sites
- Scenic Sites
- Pond, Lake, River
- Roads

0 0.25 0.5 1 1.5 Miles



Features	Relative Uniqueness	Recovery Replacement	Value to the Town	Value Beyond Town	Sites Protected Now	Priority for Protection
ECOLOGICAL HABITATS						
1. Stand of old forest trees	*	***	***	-	no	*
2. Pitch pine stand	*	**	**	-	no	
3. Tamarack-spruce stand	*	**	*	-	no	
4. Riverine meadow	*	*	**	-	yes	
5. Calcareous habitat	*	**	***	-	no	*
6. High biodiversity habitat						
A) For plants	*	**	***	-	no	*
B) For birds	*	**	***	-	no	*
C) For amphibians & reptiles	*	**	***	-	no	*
D) For invertebrates	*	**	***	-	no	*
E) For mammals	*	**	***	-	no	*
F) For fish	*	**	***	-	no	*
7. Massachusetts state-listed (23) "Areas of Ecological Significance"	**	**	***	**	no	*
8. Additional species of major interest	*	*	*	-	no	

Features	Relative Uniqueness	Recovery Replacement	Value to the Town	Value Beyond Town	Sites Protected Now	Priority for Protection
HISTORICAL FEATURES						
1. Key archaeological site	*	***	**	-		
2. Burying ground						
A) Sleepy Hollow	***	***	***	***	yes	
B) Hill	*	***	***	**	yes	
C) South	*	***	**	*	yes	
3. Old North Bridge area	***	***	***	***	yes	
4. Punkatasset Hill	*	**	*	-	yes	
5. Revolutionary Route	**	**	*	***	no	*
6. Oldest buildings	*	***	**	*	no	
7. Colonel Barrett's homestead	*	*	***	**	yes	
8. Damondale	*	*	**	-	no	
9. 19 th c. Writers' home (6)	***	***	***	***	no	*
10. Historic district (5)	**	***	***	***	yes	
11. Monument Square	*	*	**	*	yes	
12. Concord Junction	*	*	**	*	no	
13. Area made famous by Thoreau						
A) Walden Woods	***	***	**	***	no	*
B) Estabrook Woods area	***	***	**	*	no	*
C) Three Rivers	***	**	*	***	no	*
14. Brewster's October Farm	**	*	*	*	no	

Features	Relative Uniqueness	Recovery Replacement	Value to the Town	Value Beyond Town	Sites Protected Now	Priority for Protection
WATER RESOURCES						
1. River						
A) Sudbury River	*	**	***	**	no	*
B) Assabet River	*	**	***	**	no	*
C) Concord River	*	**	***	**	no	*
2. Public water supply (wells-6)	*	**	***	-	yes	*

Features	Relative Uniqueness	Recovery Replacement	Value to the Town	Value Beyond Town	Sites Protected Now	Priority for Protection
RECREATIONAL FEATURES						
1. Sightseeing area						
A) Minute Man National Historic Park	*	**	*	***	yes	
B) Historic District	*	**	*	**	yes	
2. Swimming (natural water body)						
A) White Pond	**	**	***	*	no	*
B) Walden Pond	**	**	*	***	yes	
3. Boating area/Launches						
A) River						
1. Behind Dino's Pizza	*	**	**	**	yes	
2. Lowell Road Bridge	*	**	**	**	yes	
3. Pine Street Bridge	*	**	**	**	yes	
4. Westvale	*	**	**	**	yes	
B) Pond						
1. Walden Pond	**	**	*	***	yes	
2. Warner's Pond	*	**	**		yes	
3. White Pond	*	**	**		no	
4. Fishing area						
A) Pond	*	*	*	*	no	
B) River	*	**	*	*	no	
C) Brook	*	*	*	*	no	
5. Active Recreational Facilities						
A) Beede Center	***	***	***	**	yes	
B) Cousins Field	*	*	*	*	yes	
C) Emerson Field	***	***	***	**	yes	
D) Hunt's Recreation Center	*	**	**	*	yes	
E) Rideout Playground	*	*	**	*	yes	
F) South Meadow Field	*	*	*	*	yes	
6. Sportsmen's club property	*	*	*	-	no	
7. Golf course property	*	*	**	-	no	
SCENIC						
1. Historic District (5)	**	**	***	***	yes	
2. From high point						
A) Fairhaven Cliff	*	**	*	-	no	
B) Upper Assabet River reach	*	**	*	-	no	
C) Punkatasset Hill	*	**	*	-	yes	
3. Water						
A) Walden Pond	*	**	*	**	yes	
B) Fairhaven Bay	*	**	*	-	no	
C) Great Meadows National Wildlife Refuge	*	**	*	*	yes	
4. Discrete object						
A) Waterfall on Nashoba Brook	*	*	*	-	no	
B) Egg Rock from Lowell Road	*	**	*	-	yes	
5. Opening along road						
A) Spencer Brook Valley from Lowell Road	*	**	**	*	no	
B) Westford Road	*	**	*	*	no	
6. Large agricultural areas (5)						
A) Monument Street	*	**	**	*	no	

6. Large agricultural areas (continued)						
B) Sudbury Road / Route 2 / Williams Road	*	**	***	*	no	*
C) Sudbury Road / Route 117 / ORNAC	*	**	***	**	no	*
D) Barretts Mill Road	*	**	***	*	yes	
E) Lexington Road	*	**	***	**	yes	
7. Views along roads with high traffic volumes or entrance points	*	**	**	***	no	*

Features	Relative Uniqueness	Recovery Replacement	Value to the Town	Value Beyond Town	Sites Protected Now	Priority for Protection
TOWN INFRASTRUCTURE (not shown on map)						
1. Landfill	*	*	***	*	no	*
2. Sewage treatment facility	*	*	***	-	yes	
3. Keyes Road service / office facility	*	*	**	-	no	*
4. Town Hall	*	*	**	-	yes	
5. Pipeline						
6. Fire / Police / EMS facility	*	*	***	-	yes	
7. Affordable housing sites (7)	*	*	***	-	yes	

Features	Relative Uniqueness	Recovery Replacement	Value to the Town	Value Beyond Town	Sites Protected Now	Priority for Protection
INSTITUTIONS & EDUCATION (not shown on map)						
1. MA Correctional Institution	**	*	*	**	no	
2. N.E. Correctional Facility (MA)	**	*	*	**	no	
3. Middlesex County Courthouse	*	*	*	**	no	
4. Concord Public Schools (7)						
5. Emerson Hospital	*	*	***	***	no	
6. Hanscom Field (U.S. D.O.D.)	**	**	*	***	no	
7. Middlesex School	*	**	*	**	no	
8. Concord Academy	*	**	*	**	no	
9. Fenn School	*	**	**	-	no	
10. Nashoba Brooks School	*	*	**	-	no	
11. Thoreau Lyceum	*	*	**	**	yes	
12. Estabrook Woods (Harvard)	*	***	*	*	yes	

Key to Lands of Conservation and Recreation Interest Map.

With rare exceptions, only large protected and unprotected properties in public, nonprofit and private ownership are mapped.

To protect private landowners on this state-required map, no information is available for their property except the presence of an officially recorded conservation restriction or agricultural preservation restriction.

Unless otherwise mentioned: the owner manages the land; property has no public access; no handicap accessibility is recognized; land is zoned residential; no grant was received based on readily available data; property is not conservation land protected against development; no potential for a major near-term change in mainstream recreation type is evident; and the land is in "good" condition.

All properties are zoned residential except a portion of property 54 by Route 2 zoned for limited business.

** = public land;

* = nonprofit land;

All others = private land.

N, E, S & W = compass directions.

CLCT = Concord Land Conservation Trust.

TTOR = The Trustees of Reservations.

CR = perpetual conservation restriction (properties 33 & 67 with a term restriction).

APR = agricultural preservation restriction.

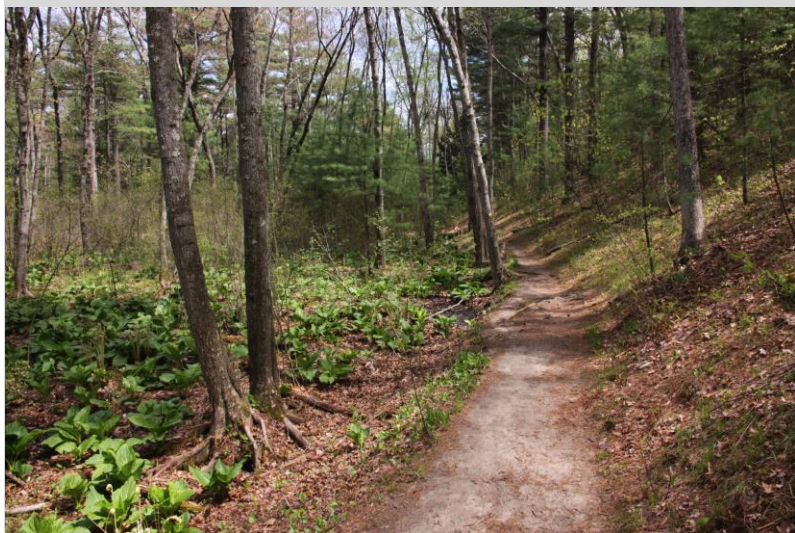
Properties of Conservation and Recreation Interest:

1. **Ball's Hill area.** Mainly private land.
2. **Spencer Brook Corridor.** Private land.
3. **NE of Bemis farmland.** Private land.
4. **Along & N of Strawberry Hill Rd. near Acton.** Private land.
5. ****NE Correctional Institution.** State land managed by Department of Corrections; farmland & area of buildings; no recreation; partially conservation protected.
6. ****Prison farmland.** State land managed by Department of Corrections; farmland; no recreation; not conservation protected.
7. ****Thoreau School.** Town land; public school grounds; public access; handicap accessibility; not conservation protected.
8. **Second Division Brook area.** Private land.
9. **Concord Country Club.** Private land. CR with term limitation.
10. ****White Pond Reservation.** Town municipal land & trails; public access; not conservation protected.
11. ****Willow Guzzle.** Town municipal land; farmland & trails; public access; not conservation protected.
12. **Nine Acre Corner E of Sudbury Rd.** Private land.
13. **Fairhaven Woods.** Private land.
14. ****Landfill area.** Town municipal land; snow dumping & leaf composting (W) & savanna created on capped landfill (E); solar array; potential for various recreation types; public access; not conservation protected.
15. **East of Kenney Farm.** Private land.
16. **East of Kaveski Farm.** Private land.
17. ****Hanscom runways.** State land managed by MassPort; airport runway area; not conservation protected.
18. ****Hanscom flightpath woods.** State land managed by MassPort; natural land; trails; not conservation protected.
19. ****Sleepy Hollow Cemetery.** Town municipal land; cemetery with natural land, trails & farmland to N; public access; some handicap accessibility; not conservation protected.
20. **Assabet River corridor.** Private land.

Properties of Conservation and Recreation Interest

Lands of conservation and recreation interest made up of unprotected land within or adjacent to the large natural and agricultural areas and corridors in the 2015 Open Space Framework are identified as "Lands of Conservation Interest in OSF" on the map on the following page. Specific parcels have not been identified in order to protect the privacy of individual landowners.

Properties of conservation interest identified include unprotected parcels (for full list of 2004 properties of conservation interest, see Appendix J). Those properties from the 2004 OSRP that have not yet been protected and that overlap with the "Unprotected areas within OSF" are included as properties of conservation interest for 2015 as "Selected 2004 Priority Lands."



Trail in Old Rifle Range by Cherrie Corey

Concord has a wealth of trails through its open space. Only trails on publicly accessible and publicly owned land are shown on the map on page 78. Improving connectivity of trails would benefit Concord residents. Accessibility of trails for an aging population is also a priority for many residents. Improving safe biking routes through Town is very important to many residents. For additional information on trails, see Section 7.

Carlisle

Bedford

Acton

Lincoln

Maynard

Wayland

Lands of Conservation and Recreation Interest

Legend

- Selected 2004 Priority Lands
- Roads
- Lands Of Conservation Interest in OSF
- Large Agricultural Area
- Large Natural Area
- Wildlife/Water Corridor
- Built Area

0 0.25 0.5 1 1.5 Miles

